



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,141	03/29/2004	Jin Cheol Hong	8733.1049.00	1113

30827 7590 03/12/2007
MCKENNA LONG & ALDRIDGE LLP
1900 K STREET, NW
WASHINGTON, DC 20006

EXAMINER

NGUYEN, DUNG T

ART UNIT	PAPER NUMBER
----------	--------------

2871

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/811,141	Applicant(s) HONG, JIN CHEOL	
	Examiner Dung Nguyen	Art Unit 2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/27/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 6-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/27/2006 has been entered.
2. Applicant's amendment dated 11/27/2006 has been received and entered. By the amendment, claims 1-5 are remain pending in the application. Claims 6-22 stand withdrawn from consideration.

Claim Rejections - 35 USC § 102

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claim 5 is rejected under 35 U.S.C 102(e) as being anticipated by Noguchi et al, US Patent No. 4,969,718.

The above claims are anticipated by Noguchi et al. figure 5A and accompanying text which disclose an active matrix LCD comprising:

- . first, second and third data lines (515, 514 and 513);
- . a first pixel electrode (523) adjacent to the first and second data lines (515, 514);
- . a second pixel electrode (517) adjacent to the second and third data lines (514, 513);

. a parasitic capacitance between the second electrode and the second data line inherently three times greater than that between the first pixel electrode and the first data line (since the distance between the second pixel electrode and the second data line is shorter than that between the first pixel electrode and the first data line).

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
6. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noguchi et al, US Patent No. 4,969,718, in view of Fujiyoshi, US Patent No. 6,327,008.

Regarding the above claims, Noguchi et al. disclose the claimed invention as described above except for a voltage deviation in the first pixel due to parasitic capacitance of the first pixel electrode being substantially the same that of the second pixel electrode as well as signals applying to the first and the second pixel electrodes are the same polarity and inverted for each two pixel electrode. Fujiyoshi does disclose applying signals having a same polarity and inverting for each two pixel electrodes as in figure 12A. It should also be noted that since the signals having a same polarity and inverting for each two pixel electrodes, a deviation in the first voltage of the first pixel electrode and the second pixel electrode would be cancelled (i.e., the voltage deviation in the first pixel due to parasitic capacitance of the first pixel electrode being substantially the same that of the second pixel electrode). Therefore, it would have been obvious to one skilled in the art at the time of the invention was made to employ signals having a same

Art Unit: 2871

polarity and inverting for each two pixel electrode in the Noguchi et al display as shown by Fujiyoshi in order to improve a display characteristics (see Summary of the Invention).

Response to Arguments

7. Applicant's arguments filed 11/27/2006 have been fully considered but they are not persuasive.

Applicant's only argument is that the elements identified by the Examiner are not arranged as recited in claims 5 and 1. The Examiner is not convinced by this argument since the same is true of the Noguchi et al. pixel electrode (as stated above).

Accordingly, the rejection of claims 1-5 stand.

Conclusion

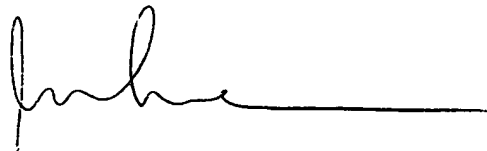
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Nguyen whose telephone number is 571-272-2297. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on 571-272-1782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2871

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DN
03/05/2007

A handwritten signature in black ink, appearing to read 'Dung Nguyen', with a long horizontal line extending to the right.

Dung Nguyen
Primary Examiner
Art Unit 2871